- 1 What is claimed is:
- 2 1. A method to elicit an effective antitumoral immune
- 3 response in a patient comprising:
- 4 generating a plurality of tumor associated antigens (TAA) in
- 5 a plurality of cells in the patient,
- 6 inhibiting an immune tolerance response relative to the TAA in
- 7 the patient to enhance the antitumoral immune response,
- 8 activating a plurality of antigen presenting cells (APC) in
- 9 the patient to further enhance the antitumoral immune response,
- 10 triggering an internal vaccine in the patient to at least
- partially elicit the antitumoral immune response, and
- 12 providing an external vaccine to the patient to further elicit
- 13 the antitumoral immune response.
- 14 2. A method as recited in claim 1 further comprising
- 15 generating the TAA in a plurality of tumor cells of the patient.
- 16 3. A method as recited in claim 1 further comprising
- 17 preserving the TAA in the patient.
- 18 4. A method as recited in claim 3 wherein preserving the TAA
- 19 further comprises inducing the synthesis of a plurality of stress
- 20 shock proteins (SSP).
- 21 5. A method as recited in claim 4 wherein inducing the
- 22 synthesis of the SSP comprises administering indomethacin to the
- 23 patient.
- 24 6. A method as recited in claim 4 wherein inducing the
- 25 synthesis of the SSP comprises administering a corticoid compound

- 1 to the patient.
- 2 7. A method as recited in claim 1 further comprising storing
- 3 the TAA in the plurality of cells of the patient.
- 8. A method as recited in claim 7 wherein storing the TAA
- further comprises inducing the synthesis of a plurality of stress
- 6 shock proteins (SSP).
- 7 9. A method as recited in claim 8 wherein inducing the
- 8 synthesis of the SSP comprises administering indomethacin to the
- 9 patient.
- 10 10. A method as recited in claim 8 wherein inducing the
- 11 synthesis of the SSP comprises administering a corticoid compound
- 12 to the patient.
- 13 11. A method as recited in claim 1 wherein generating the TAA
- 14 further comprises inducing protein synthesis in the plurality of
- 15 cells of the patient.
- 16 12. A method as recited in claim 1 further comprising
- inducing protein synthesis in the plurality of cells of the patient
- 18 via administering a pharmaceutical compound to the patient.
- 19 13. A method as recited in claim 12 further comprising
- administering a pharmaceutical compound to the patient comprising
- 21 insulin.
- 22 14. A method as recited in claim 1 wherein generating the TAA
- further comprises administering insulin to the patient.
- 24 15. A method as recited in claim 1 wherein generating the TAA
- 25 comprises administering at least one DNA targeted

- 1 chemotherapeutical to the patient.
- 2 16. A method as recited in claim 15 further comprising
- 3 administering at least one DNA targeted chemotherapeutical
- 4 comprising cyclophosphamide to the patient.
- 5 17. A method as recited in claim 15 further comprising
- 6 administering at least one DNA targeted chemotherapeutical
- 7 comprising methotrexate to the patient.
- 8 18. A method as recited in claim 15 further comprising
- 9 administering at least one DNA targeted chemotherapeutical
- 10 comprising fluorouracil to the patient.
- 19. A method as recited in claim 1 wherein activating the APC
- in the patient comprises administering a cytokine to the patient.
- 13 20. A method as recited in claim 19 further comprising
- administering the cytokine comprising granulocyte-macrophage colony
- 15 stimulating factor (GM-CSF) to the patient.
- 16 21. A method as recited in claim 1 wherein inhibiting the
- immune tolerance response for the TAA comprises administering
- 18 cyclophosphamide to the patient.
- 19 22. A method as recited in claim 1 wherein triggering the
- 20 internal vaccine in the patient comprises inducing cell death in
- 21 the plurality of cells in the patient.
- 22 23. A method as recited in claim 22 further comprising
- inducing immunogenic cell death in a plurality of tumor cells in
- 24 the patient.
- 25 24. A method as recited in claim 22 further comprising

- inducing immunogenic cell death in the plurality of cells in the
- 2 patient via apoptosis.
- 3 25. A method as recited in claim 24 further comprising
- 4 exposing the plurality of cells to cellular stress prior to
- 5 inducing immunogenic cell death in the plurality of cells in the
- 6 patient via apoptosis.
- 7 26. A method as recited in claim 22 further comprising
- 8 inducing immunogenic cell death in the plurality of cells in the
- 9 patient via autoschizis.
- 10 27. A method as recited in claim 26 wherein inducing
- immunogenic cell death in the plurality of cells in the patient via
- 12 autoschizis comprises administering ascorbic acid to the patient.
- 13 28. A method as recited in claim 27 further comprising
- 14 administering the ascorbic acid to the patient intravenously.
- 15 29. A method as recited in claim 27 wherein inducing
- immunogenic cell death in the plurality of cells in the patient via
- 17 autoschizis further comprises simultaneously administering
- 18 menadione to the patient.
- 19 30. A method as recited in claim 29 further comprising
- administering menadione to the patient intravenously.
- 21 31. A method as recited in claim 1 wherein providing the
- 22 external vaccine to the patient further comprises inoculating the
- 23 patient with the external vaccine subcutaneously.
- 32. A method as recited in claim 1 wherein providing the
- 25 external vaccine to the patient further comprises inoculating the

- 1 patient with the external vaccine via intradermal inoculation.
- 2 33. A method as recited in claim 1 wherein providing the
- 3 external vaccine to the patient further comprises inoculating the
- 4 patient with the external vaccine via intramuscular inoculation.
- 5 34. A method to elicit an effective antitumoral immune
- 6 response in a patient comprising:
- 7 completing at least one treatment cycle, each treatment cycle
- 8 comprising,
- 9 administering insulin to the patient during a preparatory
- 10 treatment phase,
- administering at least one DNA targeted chemotherapeutical to
- 12 the patient during the preparatory treatment phase,
- administering cyclophosphamide to the patient during a first
- intermediate treatment phase,
- administering a cytokine to the patient during a primary
- 16 treatment phase,
- administering ascorbic acid to the patient during the primary
- 18 treatment phase,
- 19 administering menadione to the patient during the primary
- 20 treatment phase, and
- 21 administering a hemoderivative composition to the patient
- during a secondary treatment phase.
- 23 35. A method as recited in claim 34 further comprising
- 24 administering the insulin to the patient on each of days one
- 25 through four of the treatment cycle.

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- 36. A method as recited in claim 34 further comprising administering the insulin to the patient on each of days one through five of the treatment cycle.
  - 37. A method as recited in claim 34 further comprising administering the insulin to the patient each day of the preparatory treatment phase at a daily dosage of approximately 0.3 international units per kilogram of the patient's body weight.
- 8 38. A method as recited in claim 34 further comprising 9 administering the at least one DNA targeted chemotherapeutical to 10 the patient on each of days one through four of the treatment 11 cycle.
- 39. A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical to the patient on each of days one through five of the treatment cycle.
  - 40. A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical comprising cyclophosphamide to the patient each day of the preparatory treatment phase at a daily dosage in a range of between approximately 100 to 200 milligrams.
  - 41. A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical comprising methotrexate to the patient each day of the preparatory treatment phase at a daily dosage in a range of between approximately 2.5 to 12.5 milligrams.

approximately 125 to 250 milligrams.

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- 42. A method as recited in claim 34 further comprising administering the at least one DNA targeted chemotherapeutical comprising fluorouracil to the patient each day of the preparatory treatment phase at a daily dosage in a range of between
- 43. A method as recited in claim 34 further comprising administering the cyclophosphamide to the patient on day five of the treatment cycle.
- 9 44. A method as recited in claim 34 further comprising 10 administering the cyclophosphamide to the patient each day of the 11 first intermediate treatment phase at a daily dosage of 12 approximately 300 milligrams per square meter of surface area of 13 the patient's body.
- 45. A method as recited in claim 34 further comprising administering the cytokine to the patient on each of days eight through twelve of the treatment cycle.
  - 46. A method as recited in claim 34 further comprising administering the cytokine comprising granulocyte-macrophage colony stimulating factor (GM-CSF) to the patient on each day of the primary treatment phase at a daily dosage in a range of between approximately 150 to 250 micrograms.
- 22 47. A method as recited in claim 34 further comprising 23 administering the ascorbic acid to the patient on each of days 24 eight through twelve of the treatment cycle.
- 25 48. A method as recited in claim 34 further comprising

- 1 administering the ascorbic acid to the patient each day of the
- 2 primary treatment phase at a daily dosage of approximately 25 grams
- 3 in a solution of approximately 250 milliliters of a lactate-ringer
- 4 solution.
- 5 49. A method as recited in claim 48 further comprising
- 6 administering the ascorbic acid to the patient intravenously.
- 7 50. A method as recited in claim 34 further comprising
- 8 administering the menadione to the patient on each of days eight
- 9 through twelve of the treatment cycle.
- 10 51. A method as recited in claim 34 further comprising
- administering the menadione to the patient each of day the primary
- treatment phase at a daily dosage of approximately 250 milligrams.
- 13 52. A method as recited in claim 51 further comprising
- 14 administering the menadione to the patient intravenously.
- 15 53. A method as recited in claim 51 further comprising
- administering menadione to the patient orally.
- 17 54. A method as recited in claim 34 further comprising
- administering the hemoderivative composition to the patient on each
- 19 day of the secondary treatment phase.
- 20 55. A method as recited in claim 34 further comprising
- 21 administering an autologous hemoderivative composition to the
- 22 patient on each day of the secondary treatment phase.
- 23 56. A method as recited in claim 34 further comprising
- 24 administering the hemoderivative composition to the patient on each
- of days fifteen, seventeen, nineteen, twenty-two, twenty-four, and

- 1 twenty-six of the treatment cycle.
- 2 57. A method as recited in claim 34 further comprising
- administering cyclophosphamide to the patient each day of a second
- 4 intermediate treatment phase at a daily dosage of approximately 300
- 5 milligrams per square meter of surface area of the patient's body.
- 6 58. A method as recited in claim 57 further comprising
- 7 administering the cyclophosphamide to the patient on day thirteen
- 8 of the treatment cycle.
- 9 59. A method as recited in claim 34 further comprising
- 10 completing a plurality of treatment cycles.
- 11 60. A method of preparation of an autologous hemoderivative
- 12 composition for use in eliciting an effective antitumoral immune
- response in a patient comprising:
- extracting a blood specimen from the patient and forming a
- 15 blood specimen solution,
- separating a supernatant plasma-cell layer from the blood
- 17 specimen solution after settling,
- diluting the supernatant plasma-cell layer in a dilutant
- 19 forming a plasma-cell solution and thereby inducing a hypotonic
- 20 shock,
- cooling and heating the plasma-cell solution and thereby
- 22 inducing a hypothermic shock,
- fractioning the plasma-cell solution by heating to
- 24 predetermined temperature for a predetermined period of time and
- 25 forming a plasma-cell fraction, and

- filtering the plasma-cell fraction prior to administrating to the patient.
  - 61. A method of preparation as recited in claim 60 further comprising extracting approximately 20 milliliters of the blood specimen from the femoral artery of the patient into a heparin solution thereby forming the blood specimen solution.
    - 62. A method of preparation as recited in claim 60 further comprising settling the blood specimen solution for approximately one hour and separating the supernatant plasma-cell layer.
    - 63. A method of preparation as recited in claim 60 further comprising diluting the supernatant plasma-cell layer in distilled water at a ratio in a range of approximately 3 to 4 parts distilled water per 1 part supernatant plasma-cell layer, thereby forming the plasma-cell solution.
    - 64. A method of preparation as recited in claim 60 further comprising cooling the plasma-cell solution to approximately minus twenty degrees centigrade for approximately 24 hours.
    - 65. A method of preparation as recited in claim 60 further comprising fractioning the plasma-cell solution by heating to approximately one hundred degrees centigrade for between approximately 8 to 10 minutes.
      - 66. An autologous hemoderivative composition comprising:
    - a plasma-cell solution cooled to approximately minus twenty degrees centigrade for approximately 24 hours, and subsequently heated to approximately 100 degrees centigrade for between

1 approximately 8 to 10 minutes, and filtered after cooling,

2 said plasma-cell solution being defined by a supernatant

plasma-cell layer separated from a blood specimen solution and a

4 quantity of distilled water, and

5 said blood specimen solution comprising a blood specimen

extracted from a femoral artery of a patient and a heparin

7 solution.

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